Field Report Colonial National Historical Park

■ 1.0 Summary

Colonial National Historical Park (NHP) is located in the southern tidewater region of the Commonwealth of Virginia. The Park occupies a peninsula between the James and York Rivers and encompasses the communities of Jamestown, Williamsburg, and Yorktown (see Figure 1).

Colonial NHP is a very large and complex unit of the NPS. The following excerpt from the Park's General Management Plan (GMP) (1993), summaries the composition of this unit:

"Colonial NHP, in the southern tidewater region of Virginia, encompasses most of Jamestown Island, site of the first permanent English settlement in North America, and Yorktown, scene of the culminating battle of the American Revolution (see Figure 1). The 23-mile Colonial Parkway, which connects these and other colonial sites (including Williamsburg), provides an aesthetic drive through natural environments with few modern intrusions. The Park, which occupies a peninsula between the James and York Rivers, integrates the histories of Jamestown, Williamsburg, and Yorktown for a comprehensive visitor understanding of the British colonial experience in North America."

The potentials for Alternative Transportation Systems (ATS) at Colonial NHP appear to be virtually unlimited at this time. With several potential ATS operations at Jamestown and Yorktown having already been conceptually identified in the GMP, and with the transportation planning aspects of Celebration 2007 now getting underway, the time to initiate more detailed planning and implementation is now at hand.

Colonial NHP appears to be an extremely strong candidate for the initiation of ATS services designed for large-scale visitor movement. Indeed Colonial NHP might well serve as a national model of the manner in which such services, utilizing best available vehicle technologies, could be provided in a historic, multi-unit urban environment.

Based upon an initial review, there appear to be a large number of significant ATS alternatives that should be seriously investigated for near-term implementation at Colonial NHP. With the upcoming 400th anniversary of the establishment of Jamestown, more detailed examination of these potential ATS services needs to be undertaken in the immediate future.

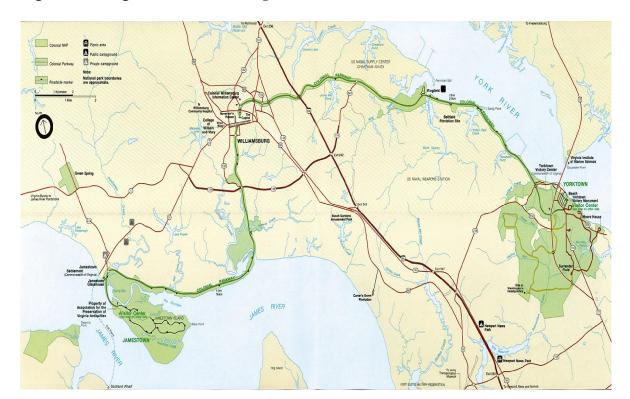


Figure 1. Regional Location Map

Candidate ATS services at Colonial NHP include the following:

- In concert with the effected state and local organizations, the NPS should plan and implement a multi-jurisdictional regional public transportation system to integrate local ATS options in the Jamestown, Williamsburg, and Yorktown areas. This regional system should include two primary elements: a series of fixed-route/fixed-schedule bus routes to link Jamestown, Williamsburg, and Yorktown; and a complimentary group of shuttle routes to connect regional visitor intercept/park-and-ride lots with transit transfer centers in the area. To the degree possible, these operations should be provided by high-capacity, alternative fuel vehicles. As deemed appropriate, these vehicles should also provide onboard visitor information and interpretation.
- A visitor shuttle system should be implemented to serve the Yorktown Battlefield area. In recognition of the narrow width and limited weight carrying capacity of the battlefield tour route, this service should be operated by low- to medium-capacity shuttle or tram type vehicles. As deemed appropriate, onboard visitor information and interpretation should be provided on these vehicles.
- A visitor shuttle system should be implemented to link the new Jamestown Visitor Center with Jamestown Island and to provide internal circulation along the island tour road. In recognition of the narrow width and limited weight carrying capacity of the island tour route, this service should be operated by low- to medium-capacity shuttle or tram type vehicles. As deemed appropriate, onboard visitor information and interpretation should be provided on these vehicles.

As a complimentary action in support of these suggested ATS operations, the proposed bicycle/pedestrian path along the Colonial Parkway linking Jamestown, Williamsburg, and Yorktown should be implemented as expeditiously as possible.

■ 2.0 Background Information

2.1 Location

Colonial NHP is located in the southern tidewater region of the Commonwealth of Virginia. The Park occupies a peninsula between the James and York Rivers and encompasses the communities of Jamestown, Williamsburg, and Yorktown.

2.2 Administration and Classification

Colonial NHP is a multi-site unit of the NPS.

2.3 Physical Description

Colonial NHP is a very large and complex unit of the NPS (see Figure 1). The following excerpt from the Park's GMP (1993), summaries the composition of this unit and the history of the Park's establishment:

"Colonial NHP, in the southern tidewater region of Virginia, encompasses most of Jamestown Island, site of the first permanent English settlement in North America, and Yorktown, scene of the culminating battle of the American Revolution. The 23-mile Colonial Parkway, which connects these and other colonial sites (including Williamsburg), provides an aesthetic drive through natural environments with few modern intrusions. The Park, which occupies a peninsula between the James and York Rivers, integrates the histories of Jamestown, Williamsburg, and Yorktown for a comprehensive visitor understanding of the British colonial experience in North America.

"In addition to the three major resources mentioned above, the Park contains several detached areas: Green Spring plantation site, where an early colonial governor made his home; Cape Henry memorial (the first landing site of the Jamestown colonists); Swann's Point, an area across the James River from Jamestown Island; and Tindalls Point, which contains various Civil War fortifications.

"Colonial National Monument was established in 1930 by congressional legislation for the preservation of the Park's historic structures and remains for the benefit and enjoyment of the people. The name was changed to Colonial NHP in 1936. The Association for the Preservation of Virginia Antiquities (APVA)

had acquired 22.5 acres at Jamestown in the 1890s, and in the 1920s Colonial Williamsburg (CW) was established as a private non-profit organization.

"Together, Colonial NHP, CW, and APVA began pioneering work in the field of historic preservation to research, preserve, restore, and interpret the first successful British colony on Jamestown Island, the second colonial capital at Williamsburg, and the last major battle of the revolutionary war at Yorktown. These primary resources were connected by a scenic road know as the Colonial Parkway, which provided easy, enjoyable travel between the sites.

"The initial vision, which reflected the sensibilities and attitudes of the age in which it was conceived, has been largely realized. Visitors today see original sites, buildings, and artifacts and learn the history of the Anglo-American colonial experience from 1607 to 1781. Others have joined with related and complementary services and facilities; for example, the Jamestown-Yorktown Foundation with the state-owned Jamestown Settlement (formerly Festival Park) and Yorktown Victory Center. Also contributing related services are state agencies, other federal agencies; the Yorktown Day Association; local cities and counties; the travel industry; and civic, patriotic, educational, and volunteer organizations."

2.4 Mission and Goals of the National Seashore

The mission and goals of Colonial NHP are summarized in the following excerpt from the Park's Fiscal Year 1999 Annual Performance Plan:

"II. Park Mission Statement for Colonial NHP.

"To preserve the cultural, scenic and natural resources of Jamestown, Yorktown an related areas, to interpret the colonial period from 1607 to 1781, and to maintain the Colonial Parkway and its surrounding resources for the benefit and enjoyment of all people.

- "III. Park Mission Goals for Colonial NHP.
- "1. Significant cultural resources and cultural landscapes of Jamestown, Yorktown, the Colonial Parkway and related areas will be protected, maintained and restored as appropriate. The cultural resources are protected and managed based on adequate scholarly and scientific information.
- "2. Appropriate celebration, commemoration, and educational activities and events will be available to all Americans and people around the world during 2007 and the years leading up to 2007. By 2007, Jamestown's resources will be preserved, studied and interpreted more effectively and accurately in accordance with plans in the 1993 GMP and the Jamestown Master Plan being jointly prepared with APVA.

- "3. Park visitors and the general public learn, understand and support the significance and purposes of the park.
- "4. The Park's natural resources are protected and managed based on adequate scholarly and scientific information and in a manner consistent with applicable policies and regulation, while supporting cultural resource objectives.
- "5. Yorktown is a vital community with a balanced mix of public and private uses that reflect Yorktown's historical size, shape, traditions and spirit, while supporting the Park's preservation and educational goals.
- "6. Visitors safely enjoy and are satisfied with the availability, accessibility, diversity and quality of Park facilities, services, and appropriate recreational opportunities.
- "7. Colonial NHP is a responsive, efficient and accountable organization, with all systems integrated to enhance productivity. Employees are competent, trained, motivated, outcome-oriented and representative of the national workforce."

2.5 Visitation Levels and Visitor Profile

Given the physical characteristics of Colonial NHP, i.e., two major visitor attractions in Yorktown and Jamestown connected by a public use federal parkway, it is somewhat difficult to get a totally accurate picture of visitation. Table 1 presents information provided by the NPS staff at Colonial NHP on annual visitation over the period 1983-1998.

As illustrated on this table, "Total Park Visitation" has been estimated to be as high as 8.63 million persons (in 1991) and as low as 4.15 million persons (in 1998). At the same time, the yearly variation in recorded visitation at the Jamestown and Yorktown visitor centers has experienced much lower and more consistent levels. At the Jamestown Visitor Center, for example, annual visitation has ranged from a high of 451,642 persons (in 1985) to a low of 301,284 persons (in 1993). Similarly, at the Yorktown Visitor Center, annual visitation has ranged from a high of 375,755 persons (in 1994) to a low of 303,386 persons (in 1983).

Much of the difference between the estimated "Total Park Visitation" and the visitation recorded at the Yorktown and Jamestown visitor centers can be attributed to the public use nature of the Colonial Parkway. As noted in the Park's GMP "Each month an average of 175,000 vehicles are driven over the parkway for purposes other than recreation. This compares to the 70,000 vehicles per month whose occupants come to the Park for recreation or to enjoy the historic resources." Assuming an average vehicle occupancy of 1.5 persons per vehicle for non-recreational users, these 175,000 vehicles per month would represent approximately 3.15 million persons per year who should not truly be included in the Park's annual visitation figures.

 Table 1.
 Colonial National Historical Park Visitation Statistics

Total Annual Visitation: 1983-1998

Year	Jamestown Visitor Center	Yorktown Visitor Center	Total Park Visitation
1983	408,063	303,386	5,965,128
1984	449,625	342,068	5,748,831
1985	451,642	343,382	5,697,690
1986	416,378	356,714	5,111,883
1987	389,604	341,569	7,085,303
1988	383,078	352,615	7,381,900
1989	342,490	335,894	6,414,421
1990	356,069	338,509	7,779,143
1991	321,615	346,609	8,630,348
1992	326,970	320,938	8,200,170
1993	301,284	310,858	7,857,010
1994	308,746	375,755	5,404,189
1995	355,045	372,661	5,032,276
1996	368,411	305,669	4,758,347
1997	360,905	319,274	4,556,829
1998	324,814	315,234	4,148,283

Season	Jamestown	Yorktown	(Months)	
Summer	45%	44%	(June to August)	
Fall	23%	25%	(September to November)	
Winter	6%	7%	(December to February)	
Spring	26%	24%	(March to May)	

Source: NPS, Colonial NHP.

The GMP provides some additional information on Park visitation as follows:

"Past information on Colonial's visitors shows different patterns for Jamestown and Yorktown; the two cannot be combined for an average total figure. A total of 18 percent of Jamestown's visitors were local residents, 20 percent were regional visitors living within a two- to three-hour drive of the Park, 60 percent were from other parts of the nation, and two percent were from other countries. At Yorktown, the breakdown was 15 percent local residents, 40 percent regional residents, 43 percent national residents, and two percent international visitors. In-depth visitation

statistics are need for best management of interpretation and visitor services; for example, data are needed on visitors' use of interpretive programs, brochures and handouts, and information services.

"Visitation to the Park is computed by adding visitation figures for special use areas: the Jamestown visitor center, the Yorktown visitor center, the Nelson house, the Moore house, and the Yorktown town center. All these are classified as "historical" visits; that is, visits to features of historical interest. It is estimated that the average visit to the visitor center takes three-quarters of an hour and to other sites, half an hour each.

"The days of heaviest visitation are the Fourth of July, Yorktown Day, and Jamestown Day. Overall, high visitation is between May and October. Special events at other area attractions can affect visitation at Colonial."

■ 3.0 Existing Conditions, Issues and Concerns

3.1 Transportation Conditions, Issues and Concerns

As would be expected with a Park of such a large and diverse nature, the movement of visitors is a major consideration at Colonial NHP. Based on conversations with Park staff and other agency representatives, and limited field observations, it appears that ATS have the potential to play a major role in the provision of improved mobility for Park visitors. At the same time, the expanded use of ATS appears to have the potential to reduce currently observed impacts on the Park's resources.

Traffic congestion is a growing issue throughout this part of Virginia. Major arterial highways such as I-64, U.S. Route 60, and State Route 199 are heavily traveled throughout much of the day. Traffic congestion is particularly noticeable during summer weekends, when recreational travel to and from the Williamsburg and Virginia Beach areas competes for space with general commuter traffic. The geographic shape of the region, a narrow peninsula bounded on the north and south by, respectively, the York and James Rivers, contributes to a focusing of traffic demand into a few major corridors. The Virginia Department of Transportation (VDOT) and the local governments are examining potential long-term solutions to these problems through such efforts as the I-64 Major Investment Study. However, other than those highway improvements that are now under construction, little if any change in regional highway system capacity is anticipated over the next 10 to 15 years.

During initial discussions with Colonial NHP staff, a Park-developed handout was distributed in which the following points were made regarding the potential for ATS at Colonial NHP:

- "1. Water, Tram, and Bike Services at Jamestown.
- "Purpose would be to have visitors leave their cars in one place (Neck of Land Gateway, Island or Settlement) and move among the places with alternative transportation that will also include an interpretive element.
- "Responsible: the NPS, APVA, and JYF may be the primary parties responsible, but James City County (JCC), CW, City of Williamsburg, VDOT and others would also play roles.
- "2. Bus Service from the CW Visitor Center.
- "During heavy visitation times and certainly during 2007, visitors would leave their cars at the CW Visitor Center and use buses to travel to and from Jamestown and Yorktown.
- "Responsible: CW, the NPS, APVA, and JYF may be the primary parties responsible, but JCC, City of Williamsburg, VDOT and others would also play roles.
- "3. Pedestrian/Bike Trail from Jamestown to Williamsburg to Yorktown in and near the Colonial Parkway Corridor.
- "Purpose would be to provide a recreational trail for the enjoyment of people visiting the area and to provide an alternate transportation way of getting to Jamestown, Williamsburg and Yorktown. First priority for construction would probably be from Neck of Land Gateway to Jamestown.
- "Responsible: the NPS, JCC, YC, City of Williamsburg, CW, APVA, JYF, VDOT and others.
- "Related: Alternate Transportation to Jamestown for 2007.
- "Purpose would be for people to park at other places in the JCC/Williamsburg area, leave their cars there, and be transported to Jamestown by bus or other means."

It is clear that the staff at Colonial NHP has a good appreciation for the potentials of ATS and view this as a major direction for visitor transportation services to take over the next few years.

A driving force for both these NPS activities, and those being conducted by other agencies in the region, is the upcoming 400th anniversary of the establishment of the Jamestown Colony in 2007. Efforts are now underway on the part of the Celebration 2007 organization and the Commonwealth of Virginia to initiate detailed planning for the visitor transportation services necessary to accommodate the anticipated increase in visitation expected in the year 2007. Specific transportation-related issues associated with the Park and the surrounding area are discussed below.

New Jamestown Visitor Center

In cooperation with the Jamestown Yorktown Foundation (Jamestown Settlement) and APVA, the NPS is planning to construct a new, consolidated visitor center for Jamestown. This new facility would be located along the Colonial Parkway to the east of Powhattan Creek (see Figure 2). This would not only create a more formal "gateway" to the island, but would allow for the existing inadequate NPS visitors center and associated parking area to be removed from the island proper.

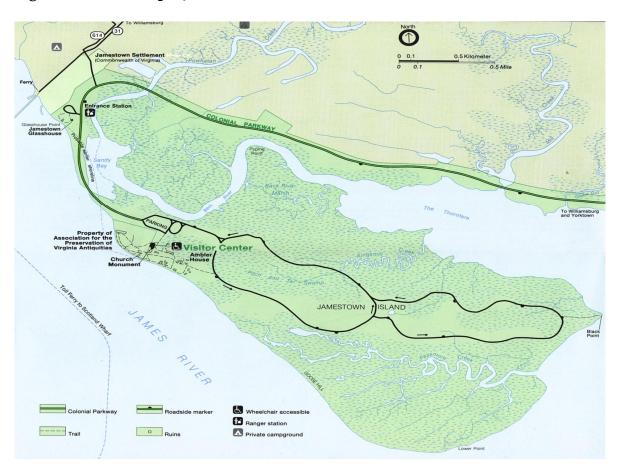


Figure 2. Park Map - Jamestown Island

Proposed access to the island from the new visitor center would be via a variety of modes, including: water shuttles, bicycles, walking, and some type of tram or shuttle bus. The NPS staff view the preferred way for visitors to arrive at the island to be by boat across the Back River, similar to the way in which the original European settlers arrived on the island. There will also be bike and hiking paths connecting the various sites on the island. As noted in the GMP, the NPS staff would also like to offer a tram service to operate on the Jamestown loop road. This tram is envisioned as having some type of interpretive guide, either a recording or a human guide. However, this tram would need to be a lightweight vehicle since standard buses are prohibited from using the existing island loop road because the pavement was not designed for heavy vehicles. The new consolidated

Jamestown visitors center would also serve as a park-and-ride lot for the Jamestown Settlement, and would help to solve the parking shortage plaguing this site today.

An existing parking problem on Jamestown island concerns the use of the Glasshouse parking lot in early morning hours by large numbers of buses. With the NPS facilities opening at 8:30 a.m. and the Jamestown Settlement not opening until 9:00 a.m., large numbers of tour buses make the Glasshouse their first tour stop. Since only six bus and large RV spaces are provided at the Glasshouse, congestion and undesirable parking patterns are a common occurrence.

Colonial Williamsburg Visitor Center

In the Williamsburg area itself, the CW Visitor Center is seen by the NPS and other agency staff as the key point for the start of regional visitation. The CW Foundation is planning to spend approximately \$100 million over the next five years to reconstruct their existing visitor center and make this into a regional visitor center. This would serve as a central transit terminal for the region as well as providing a consolidated visitor information and attraction ticket sales location. The NPS staff are working with CW to secure an appropriate "presence" in this new facility. In this regard, the NPS staff expressed the view that some form of ATS service will be needed to link this new regional visitor center in Williamsburg with Jamestown and Yorktown.

Colonial Parkway and Internal Park Roadways

A transportation issue noted by the NPS staff was the ability of the existing Colonial Parkway to accommodate a substantial increase in the volume of bus traffic. Colonial NHP is viewed as having one of the highest bus volumes of any Park in the NPS system, particularly on those portions of the parkway in the Williamsburg area. With the Yorktown to Williamsburg section of the parkway dating from the 1930s, the Williamsburg tunnel dating from the 1940s, and the Williamsburg to Jamestown section dating from the early 1950s, the maintenance and rehabilitation of the existing parkway mainline and its bridges and road-side markers is a continuing concern.

It was noted that all buses weighing more than five tons (10,000 lbs.) are prohibited from using the Yorktown Battlefield internal tour route and the Jamestown Island tour loop. The comment was made that these roadways were designed for use by individual automobiles, not buses. At the same time, it was noted that this creates a conflict with the expressed desire to handle increased visitation levels on ATS systems. Park staff noted that, in the 1970s, the Park initiated the operation of four Bluebird school-bus type vehicles to provide tours of the Yorktown Battlefield. Each of these vehicles carried 25 to 30 passengers. The use of these vehicles was discontinued in the early 1980s due to the previously noted roadway weight limitations and a reduction in the Park's operating budget. The Park's GMP recommends the reestablishment of this service.

Yorktown Trolley Service

The York County government has recently acquired a trolley bus to provide internal circulation within Yorktown and immediate environs. The basic routing will connect the

NPS visitor center to the Commonwealth of Virginia's Yorktown Victory Center to the Yorktown waterfront, and then return to the NPS visitor center (see Figure 3). The service is to be provided on weekends only between Labor Day and Memorial Day. During the heavier Memorial Day to Labor Day visitation period, the service will be operated daily. The defined routing will take approximately 15 minutes, and no fare is to be charged. Funding for this service, estimated to cost approximately \$20,000 during its first year of operation, is being provided by a combination of a Congestion Mitigation and Air Quality (CMAQ) grant (for capital acquisition), and lodging tax receipts. Some existing downtown area parking is to be eliminated in conjunction with the implementation of this service; visitors will be directed to use the NPS visitor center parking lot.

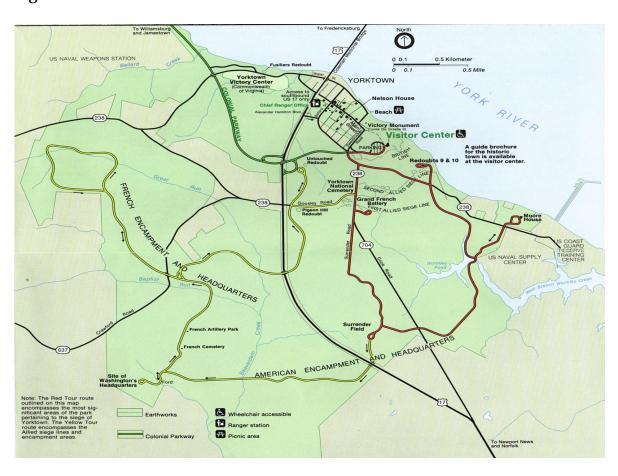


Figure 3. Yorktown Battlefield and Environs

James City County Transit System

For some years, JCC has operated both fixed-route and demand-responsive public transit services. The primary clientele for these services has been the area's transit dependent persons; that is, those without automobiles. The current fixed-route service operates primarily in the City of Williamsburg and adjacent areas of JCC, with some limited service provided into York County. Over the period of Fiscal Year 1990 through Fiscal Year 1999, annual ridership on the fixed route services averaged approximately 69,200 persons.

During this same period, ridership on the demand-responsive ADA service averaged approximately 5,500 persons per year.

In the summer of 1998, JCC Transit initiated a new service to provide local transportation for visitors between hotel areas and the regions commercial districts. Operated only during the period between Memorial Day and Labor Day, the Williamsburg Area Visitors Shuttle, known as "Relax and Ride" has proven to be quite successful. During its initial year of operation, this service transported approximately 58,000 persons. During the summer of 1999, this service transported over 121,000 persons. With a fare structure allowing unlimited rides at a cost of only \$1.00 per day, the use of this operation has substantially exceeded its initial expectations. This level of ridership response indicates that visitors to the area are willing to ride local transit services that satisfy their needs, and demonstrates the potential for expanded services of this nature. JCC Transit has recently initiated a study to determine how the county transit system can best accommodate the increased demands likely to be generated during Celebration 2007.

Colonial Williamsburg Transit System

The largest existing transit service in the area is operated by Colonial Williamsburg (CW), and transports approximately 3.3 million riders per year. CW operates a fleet of 24 full-size and five 20- to 25-passenger buses that link the CW Visitor Center and the restored historic area. The CW transit system is viewed as having the potential to serve as the "catalyst" for an expanded regional public transit plan. Plans are underway for the construction of a new, expanded visitor center that would include approximately 1,800 parking spaces. This location was also seen as the potential focal point for all local and regional transit services. These are seen as including, but not limited to: the CW bus system, the JCC bus system, the JCC "Relax and Ride" system, the College of William and Mary campus shuttle bus system, and the Yorktown shuttle bus.

As CW proceeds with the creation of the new regional visitors center, the need was also identified in conversations with CW staff for a new bus maintenance facility. It was suggested that this new facility could serve not only the CW transit operations, but perhaps those of the other local transit services as well. CW has identified several sites on their property where such a consolidated transit maintenance facility could be constructed. In the view of CW staff, such a location might also have the potential to provide a tour bus staging area, a facility currently lacking in Williamsburg. At the present time, whenever large numbers of tour buses congregate in the vicinity of the historic district, the capacity of the street system and parking areas are overwhelmed.

The need for a mix of transit rolling stock in the region was noted by several persons interviewed, with specific vehicle types matched to specific service needs. At the present time, CW has eight natural gas powered buses in its fleet, with four additional natural gas powered vehicles to be acquired in 2000.

Bicycling

Bicycling is a currently well-used and growing travel mode in the region. The generally flat to gently rolling terrain is conducive to bicycle usage. Colonial NPS staff are working

with representatives of the adjacent jurisdictions on the creation of a new, off-road bicycle and pedestrian path to be constructed adjacent to the Colonial Parkway. Although plans are still in a very conceptual stage, this facility is envisioned as linking Yorktown, Williamsburg, and Jamestown in time for Celebration 2007.

Bicycle usage is relatively common throughout the area by residents, students at the College of William and Mary, and visitors. A regional bicycle and pedestrian plan exists. VDOT has recently completed initial planning for the "Capital to Capital" trail, which would be a partly on-road, partly off-road bicycle and pedestrian path along the State Route 5 corridor along the James River between Williamsburg and Richmond.

Celebration 2007

As noted previously, one of the current driving factors in transportation planning in the Jamestown – Williamsburg – Yorktown area is Celebration 2007. With the first report to the Governor of Virginia and the State Legislature by this group due in December of 1999, the planning for the events to take place during 2007 is still in its initial stages. At this time, a three-tiered series of activities is anticipated. These include: 1) a major international event in May of 2007; 2) a group of major events throughout the year; and 3) ongoing commemorative activities over a 12- to 18-month period.

While the need for closely coordinated joint transportation planning by all parties concerned has been recognized, these processes are just getting underway at this time. The Virginia Department of Rail and Public Transportation has been designated as the lead state agency in this planning process. Celebration 2007 is viewed as having the potential to make the same type of lasting contribution to the region as that which occurred in 1957 at the time of the 350th anniversary celebration of Jamestown.

3.2 Community Development Conditions, Issues and Concerns

The Jamestown-Williamsburg-Yorktown area is heavily dependent upon tourism for its economic well being. In addition to the historical attractions provided at Jamestown, Yorktown, and Williamsburg, a growing number of large-scale commercial recreational attractions (such as Busch Gardens and Water County USA) and outlet shopping malls serve to bring visitors to the region throughout the year.

Based upon conversations with local agency staff and a brief review of local planning documents, there is a strongly held desire to ensure that high-quality, well-designed development takes place in this region. The City of Williamsburg has particularly strong design guidelines. The high quality of life in the region is serving to attract high-quality residential and commercial development. Indeed, an issue noted in conversations was the difficulty in finding adequate numbers of employees for the many service establishments in the Williamsburg area due to the high cost of living.

With respect to Colonial NHP, developmental concerns are primarily associated with the potential for residential development taking place in close proximity to the Park boundaries. This is particularly a concern along portions of the Colonial Parkway, which has only

a 500-foot wide right-of-way over most of its length. A specific development concern for the Park relates to the future of a dairy farm located along the Parkway to the east of Jamestown Island, since adjacent areas of JCC have already been developed as residential communities.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

Colonial NHP is especially aware of its responsibilities to properly preserve and interpret the historical and cultural resources under its jurisdiction. Active archaeological investigations are underway at Jamestown Island and Green Spring Plantation. The Park's collections of archaeological artifacts at Yorktown and Jamestown are currently housed in inadequate facilities, raising concerns over the ability to properly preserve and protect these assets. Another important management concern to Park staff is the need for coordination of current and future preservation and interpretation activities between the NPS and the several other groups involved in this process.

These concerns are perhaps best be summarized in the following excerpts from the Park's GMP dealing with the management emphasis for the Park:

"The primary emphasis of this plan is to clarify and strengthen the Park's goals of conservation and visitor understanding and enjoyment. Cultural, natural, and recreational resources must be protected, preserved, and restored if the integrity of these national treasures is to be retained. Expanded and upgraded resource management and research programs are essential if Park resources are to remain unimpaired for present and future generations. Improvement of interpretive, educational, and visitor use programs is vital if the Park is to fulfill its potential for U.S. and international visitors.

"Cooperation and support from neighbors, visitors, organizations and agencies is essential. For Colonial NHP to accomplish its mission, emphasis will be placed on Park Service cooperation with Association for the Preservation of Virginia Antiquities (APVA), York County, the Yorktown Trustees, the Yorktown Steering Committee, the Jamestown/Yorktown Foundation, CW, the City of Williamsburg, JCC, nearby military installations, the Virginia state historic preservation office, other state agencies, the Eastern Park and Monument Association, neighbors, volunteers, and interested nonprofit organizations.

"Visitors' enjoyment of the Park will be enhanced, especially at Jamestown, Jamestown Island, the Colonial Parkway, Yorktown, and the Yorktown Battlefield. The results of all actions will be closely monitored so that protection of the Park's cultural and natural resources will be ensured."

3.4 Recreation Conditions, Issues and Concerns

Recreational activities at Colonial NHP are somewhat limited. Principal activities of this nature include hiking, biking, jogging, bird watching, and fishing. The primary orientation

of this Park is towards providing visitors with guided tours and exhibits which illustrate the historical importance of the region.

■ 4.0 Planning and Coordination

4.1 Unit Plans

The current Park GMP was approved in September 1993, and is still the primary planning document for this unit of the NPS. More recent planning studies such as the *Yorktown Battlefield Trail Plan* (June 1995), the *Yorktown Long-Range Interpretive Plan* (February 1999) and the ongoing *Jamestown Island Master Plan* are viewed as detailed refinement studies to the GMP.

4.2 Public and Agency Coordination

The Park maintains a very active and continuing planning coordination process with all of the federal, state and local agencies in the region as well as a wide variety of private entities. These include: the U.S. Navy, the U.S. Coast Guard, VDOT, the Virginia State Historic Preservation Office, APVA, York County, the Yorktown Trustees, the Yorktown Steering Committee, the Jamestown/Yorktown Foundation, CW, the City of Williamsburg, JCC, the Eastern Park and Monument Association, neighbors, volunteers, and interested nonprofit organizations.

The Park is an active participant in the ongoing planning for the Celebration 2007 activities. Continuation of these outreach activities are viewed as extremely important by Park staff.

■ 5.0 Assessment of Need

5.1 Magnitude of Need

The potentials for ATS at Colonial NHP appear to be virtually unlimited at this time. With several potential ATS operations at Jamestown and Yorktown having already been conceptually identified in the GMP, and with the transportation planning aspects of Celebration 2007 now getting underway, the time to initiate more detailed planning and implementation is now at hand.

Colonial NHP appears to be an extremely strong and viable candidate for the initiation of ATS services designed for large-scale visitor movement. Indeed Colonial NHP might well serve as a national model of the manner in which such services, utilizing best available vehicle technologies, could be provided in a historic, multi-unit urban environment.

5.2 Feasible Alternatives

Based upon an initial review, there appear to be a large number of significant ATS alternatives that should be seriously investigated for near-term implementation at Colonial NHP. With the upcoming 400th anniversary of the establishment of Jamestown, more detailed examination of these potential ATS services needs to be undertaken in the immediate future.

Candidate ATS services at Colonial NHP include the following:

- In concert with the effected state and local organizations, the NPS should plan and implement a multi-jurisdictional regional public transportation system to integrate local ATS options in the Jamestown, Williamsburg, and Yorktown areas. This regional system should include two primary elements: a series of fixed-route/fixed-schedule bus routes to link Jamestown, Williamsburg, and Yorktown; and a complimentary group of shuttle routes to connect regional visitor intercept/park-and-ride lots with transit transfer centers in the area. To the degree possible, these operations should be provided by high-capacity, alternative fuel vehicles. As deemed appropriate, these vehicles should also provide onboard visitor information and interpretation.
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- As a complimentary action in support of these suggested ATS operations, the proposed bicycle/pedestrian path along the Colonial Parkway linking Jamestown, Williamsburg, and Yorktown should be implemented as expeditiously as possible.

■ 6.0 Bibliography

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■ 7.0 Persons Interviewed

Norm Beatty, Executive Director, Celebration 2007, Jamestown, Virginia

James Bennett, Director of Operations, Colonial National Historical Park

Skip Brooks, Director of Maintenance, Colonial National Historical Park

J. Mark Carter, Assistant to the County Administrator, County of York, Virginia

Richard Drumwright, Transit Administrator, James City County, Williamsburg, Virginia

Dwight Farmer, Director of Transportation, Hampton Roads Planning District Commission

Dorothy Geyer, Landscape Architect, Colonial National Historical Park

Alec Gould, Superintendent, Colonial National Historical Park

Andrew J. Hungerman III, Vice President-Operations, The CW Foundation, Williamsburg, Virginia

Patricia M. MacDonald, Communications Manager, Williamsburg Area Convention and Visitors Bureau, Williamsburg, Virginia

Danny L. McDaniel, Director, Security, Safety and Transportation, The CW Foundation, Williamsburg, Virginia

Reed T. Nester, Planning Director, City of Williamsburg, Virginia

O. Marvin Sowers, Jr., Planning Director, James City County, Williamsburg, Virginia